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# Writing Macros and Programs for Voyager Cataloging

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# Writing macros and programs for Voyager cataloging

Kathryn Lybarger  
ELUNA 2013  
May 3, 2013

@zemkat

#ELUNA2013

# Cataloging Interface

Voyager Cataloging - [Bib 3386031 : Fostering children's number sense in grades K-2 : turning math inside out / Greg Nelson, Bri...

File Edit Record Related Records Display Options Window Help

New Open Save Search Headings Titles Save to DB Get Bib New Hldgs Get Hldgs New Items Get Items Hierarchy Help

MARC System History

☐ Suppress from OPAC

Leader 01240cam a2200385 i 4500 006

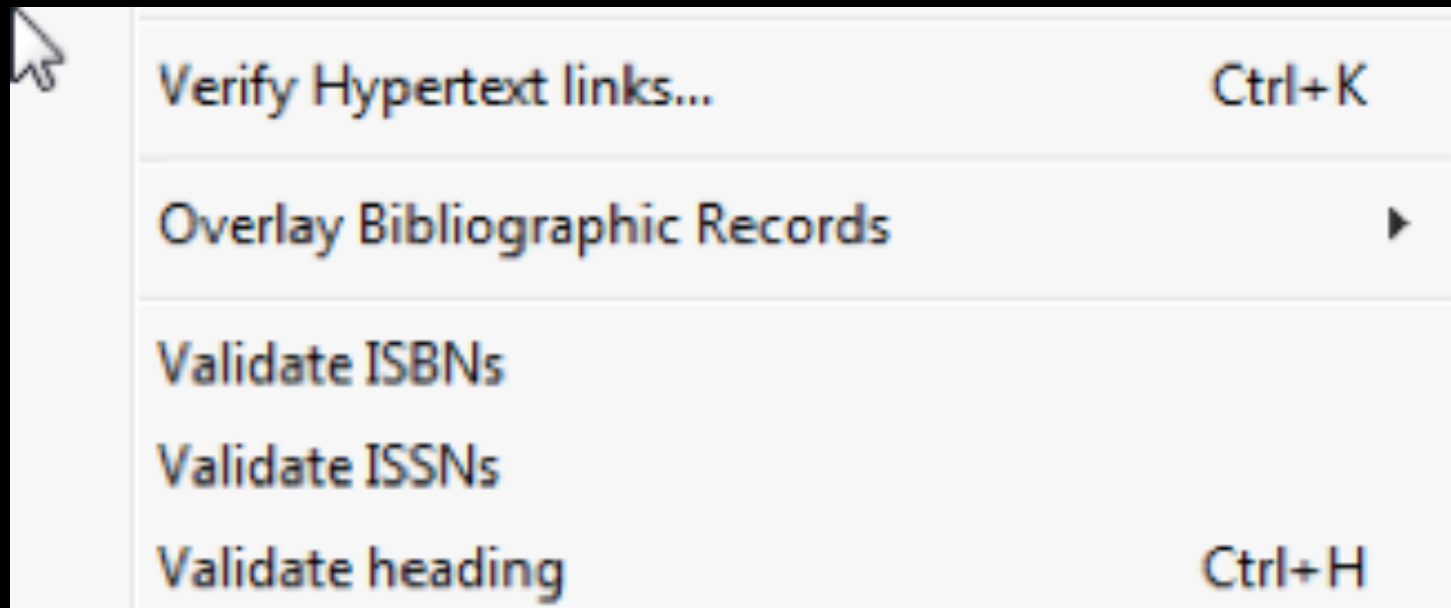
005: 20130412110040.0 007

008 130319 s 2014 mau a \_ \_ b \_ \_ 0 0 1 \_ 0 \_ eng \_ \_

Tag	I1	I2	Subfield Data
010			1a 2012050998
035			1a (OCoLC)ocn798058358
040			1a DLC 1e rda 1b eng 1c DLC 1d YDX 1d BTCTA 1d YDXCP 1d OCLCO
020			1a 9780132981514
020			1a 0132981513
024			1a 7460514
035			1a (OCoLC)798058358
042			1a pcc
050	0	0	1a QA141.15 1b .N45 2014
082	0	0	1a 372.7 12 23
049			1a KUKU
100	1		1a Nelson, Greg, 1d 1951 May 3-
245	1	0	1a Fostering children's number sense in grades K-2 : 1b turning math inside out / 1c Greg Nelson, Bridgewater State University.
264		1	1a Boston : 1b Pearson, 1c [2014]
300			1a xii, 160 pages : 1b illustrations ; 1c 28 cm.

Library Of Congress Control Number 4:29 PM

## Menu options



# Binary MARC

01722nam 2200361 a 450000100130000000300060001300500170001900800410003603500210  
00770350025000980400023001230420008001460430012001540490009001660740014001750860  
03000189110007700219245024700296260008500543300003400628490002300662504004100685  
50000360072665000490076265000470081165000400085865000560089865000550095465000390  
1009650003301048776021901081810006001300^^ocn804897382^^0CoLC^^20120813085941.0^  
^120806s2012 dcua b f000 0 eng c^^ ^\_a(0CoLC)804897382^^ ^\_a(Marcive)  
tmp97407160^^ ^\_aSEN^\_cSEN^\_dGPO^\_dMvI^^ ^\_apcc^^ ^\_an-us---^^ ^\_aKUKL^^ ^\_  
a1009-B-05^^0 ^\_aY 4.IN 2/11:S.HRG.112-423^^1 ^\_aUnited States.^\_bCongress.^\_bSe  
nate.^\_bCommittee on Indian Affairs (1993- )^^10^\_aInternet infrastructure in na  
tive communities :^\_bequal access to e-commerce, jobs and the global marketplace  
: hearing before the Committee on Indian Affairs, United States Senate, One Hun  
dred Twelfth Congress, first session, October 6, 2011.^^ ^\_aWashington :^\_bU.S.  
G.P.O. :^\_bFor sale by the Supt. of Docs., U.S. G.P.O.,^\_c2012.^^ ^\_aiii, 111  
p. :^\_bill. ;^\_c24 cm.^^1 ^\_aS. hrg. ;^\_v112-423^^ ^\_aIncludes bibliographical  
references.^^ ^\_aShipping list no.: 2012-0409-P.^^ 0^\_aIndians of North America  
^\_xComputer networks.^^ 0^\_aInternet^\_xEconomic aspects^\_zUnited States.^^ 0^\_aE  
lectronic commerce^\_zUnited States.^^ 0^\_aTelecommunication^\_xEconomic aspects^\_  
zUnited States.^^ 0^\_aEntrepreneurship^\_xEconomic aspects^\_zUnited States.^^ 0^\_  
aMedical telematics^\_zUnited States.^^ 0^\_aJob creation^\_zUnited States.^^08^\_i0  
nline version:^\_aUnited States. Congress. Senate. Committee on Indian Affairs (1  
993- ).^\_tInternet infrastructure in native communities : equal access to e-comm  
erce, jobs and the global marketplace^\_w(0CoLC)798945205^^1 ^\_aUnited States.^\_b

# Better interface for editing

008 - General Description (Book)

Publication Status	s : Single known date/probable date
Date 1 (yyyy)	2014
Date 2 (yyyy)	_____
Place of Publication	mau : Massachusetts
Illustrations 1	a : Illustrations
Illustrations 2	_ : No illustrations

	Tag	I1	I2	Subfield Data
	264		1	‡a Boston : ‡b Pearson, ‡c [2014]
	300			‡a xii, 160 pages : ‡b illustrations ; ‡c 28 cm.
	336			‡a text ‡2 rdacontent
	337			‡a unmediated ‡2 rdamedia
	338			‡a volume ‡2 rdacarrier
	490	1		‡a Pearson professional development

# Database Fields and Indexes

BIB_TEXT	
*	
🔑	BIB_ID
	AUTHOR
	TITLE
	TITLE_BRIEF
	UNIFORM_TITLE
	EDITION
	ISBN
	ISSN
	LCCN
	NETWORK_NUMBER
	SERIES

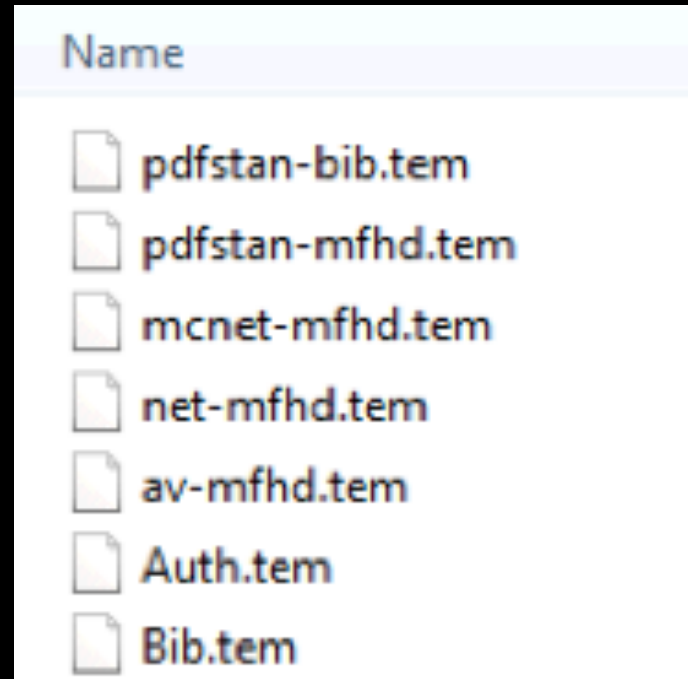
ELINK_INDEX						
ELINK_ID	RECORD_ID	RECORD_ID	SEQUENCE	LINK_TYPE		
2306724	B	3371551	1	URL	h	
2306725	B	3371553	1	URL	h	
2306726	B	3371554	1	URL	h	
2306727	B	3371555	1	URL	h	
2306728	B	3368367	1	URL	h	
2306729	B	3368371	1	URL	h	
2306730	B	3368370	1	URL	h	

Record: 1 | No Filter | Search



# Templates and Settings

- Add static fields to any new MARC record
- Automatically generate a new authority record, pulling data from the bib record
- Item settings to be applied to all new items





Some data is not (easily)  
available

Voyager Cataloging - [Bib 3386031 : Fostering children's num

File Edit Record Related Records Display Options

New Open Save S

☒ Print Spine Label ☒ Print Piece Label

Name: \\BUUniversity of Kentucky Libraries\\b Addr1: \\UWilliam T. Young Library\\u Bib Id:	Name: \\BUUniversity of Kentucky Libraries\\b Addr1: \\UWilliam T. Young Library\\u Bib Id: 3386031 Author: Nelson, Greg, 1951 May 3- Imprint: Title: Fostering children's number sense in grades K-2 : turning math inside out / Greg Nelson, Bridgewater State University. Title - Brief: Fostering children's number
---	---

Number of Copies: 1

Some data is hard to see  
(and capture) together

285 items found for holding 543904

Enum	Chron	Copy	Item Barcode	Location
v.1	(1964)	1	3042534854634	Remote Storage Math Sci [P]
v.2	(1965)	1	3042534854645	Remote Storage Math Sci [P]
v.3	(1966)	1	3042534854656	Remote Storage Math Sci [P]
v.4	(1966)	1	3042534854667	Remote Storage Math Sci [P]
v.5	(1967)	1	3042534854678	Remote Storage Math Sci [P]
v.6	(1967)	1	3042534854689	Remote Storage Math Sci [P]
v.7	(1967)	1	3042534854296	Remote Storage Math Sci [P]
v.8	(1968)	1	3042534854320	Remote Storage Math Sci [P]

Move before

Move after

Cancel Move

Save

OK Cancel View Holdings Clear Select All Print Selected

# Hard to edit multiple records at once

Voyager Cataloging

File Edit Record Related Records Display Options Window Help

New Open Save Search Headings Titles Save to DB Get Bib New Hlds Get Hlds New Items Get Items Hierarchy Help

**Bib 2707330 : Journal of algebraic ge...**

MARC | System | History |

☐ Suppress from OPAC

Leader: 01810cas a22004217a 4500 006 mc  
005: 20071220114004.0 007 c:r  
008: 010417 c 1992 9999 ilu \_ x \_ p s s \_ \_ \_ C

Tag	I1	I2	Subfield Data
010			1a 2001214111
035			1a (OCoL C)ocm4676

**Bib 2530352 : Journal of algebraic co...**

MARC | System | History |

☐ Suppress from OPAC

Leader: 01709cas a2200397 a 4500 006 mc  
005: 20071001134353.0 007 c:r  
008: 070724 c 1992 9999 mau b x \_ p s s \_ \_ \_

Tag	I1	I2	Subfield Data
010			1a 2004233198
035			1a (OCoL C)ocm3826

**Bib 2496124 : Journal of algebra [ele...**

MARC | System | History |

☐ Suppress from OPAC

Leader: 01563cas a2200397 a 4500 006 mc  
005: 20080304161636.0 007 c:r  
008: 970529 c 1964 9999 flu s r \_ p s s \_ \_ \_ 0

Tag	I1	I2	Subfield Data
010			1a sn 97004515
035			1a (OCoL C)ocm3698

**Bib 1167082 : Journal of algebraic ge...**

MARC | System | History |

☐ Suppress from OPAC

Leader: 01323cas a2200385 a 4500 006  
005: 20071220113931.0 007  
008: 910506 c 1992 9999 ilu q r \_ p \_ \_ \_ C

Tag	I1	I2	Subfield Data
010			1a 92642364 1z sn 91000224
035			1a

**Bib 1557413 : Journal of algebraic co...**

MARC | System | History |

☐ Suppress from OPAC

Leader: 01498cas a2200385 a 4500 006  
005: 20071001134116.0 007 c:r  
008: 920901 c 1992 9999 mau b x \_ \_ \_ \_

Tag	I1	I2	Subfield Data
010			1a 93648949 1z sn 92021345 1z cn 94390065

**Bib 486263 : Journal of algebra.**

MARC | System | History |

☐ Suppress from OPAC

Leader: 01393cas a2200397 a 4500 006  
005: 20071001133356.0 007  
008: 751101 c 1964 9999 be\_ s r \_ p \_ \_ \_

Tag	I1	I2	Subfield Data
010			1a sn 78000107
035			1a (OCoL C)ocm0175

2:43 PM

# Pick and Scan

- Powerful editing for Voyager items
- (can suppress Bib/Mfhd)
- Accepts a list of Item barcodes

The screenshot shows the 'Pick And Scan' dialog box, which is used for editing Voyager items. The dialog is divided into two main sections: 'Item Options' and 'Items'. The 'Item Options' section contains several dropdown menus for editing item details, all currently set to 'No Change'. These include Holding Location, Permanent Location, Temporary Location, Permanent Type, Temporary Type, Media Type, and a 'Self Check' section with 'Magnetic Media' and 'Sensitizer'. The 'Items' section contains options for Item Status, Statistical Categories, a 'Delete Item' checkbox, and a 'Suppress from OPAC' section with 'Bib' and 'MFHD' dropdowns. A 'Close' button is located at the bottom right of the dialog.

Pick And Scan

Item Options

Holding Location: No Change

Permanent Location: No Change

Temporary Location: No Change

Permanent Type: No Change

Temporary Type: No Change

Media Type: No Change

Self Check

Magnetic Media: No Change

Sensitizer: No Change

Items

Item Status: No Change ☐ Clear All

Statistical Categories: No Change ☐ Clear All

☐ Delete Item

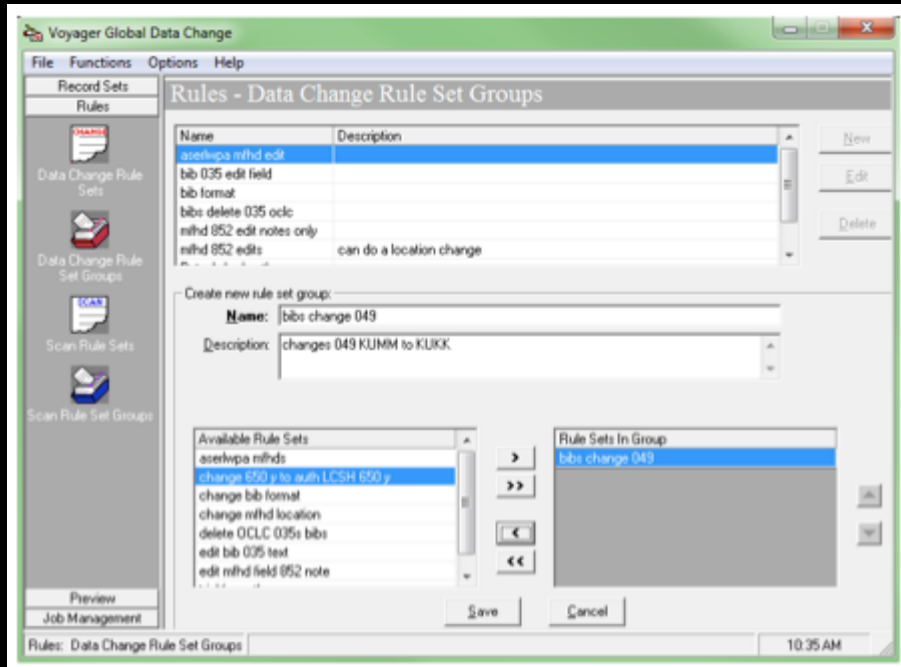
Suppress from OPAC

Bib: No Change

MFHD: No Change

Close

# Global Data Change



- Available from Voyager SysAdmin module
- Select records by search, list or scan
- Apply complex rules
- Preview and apply

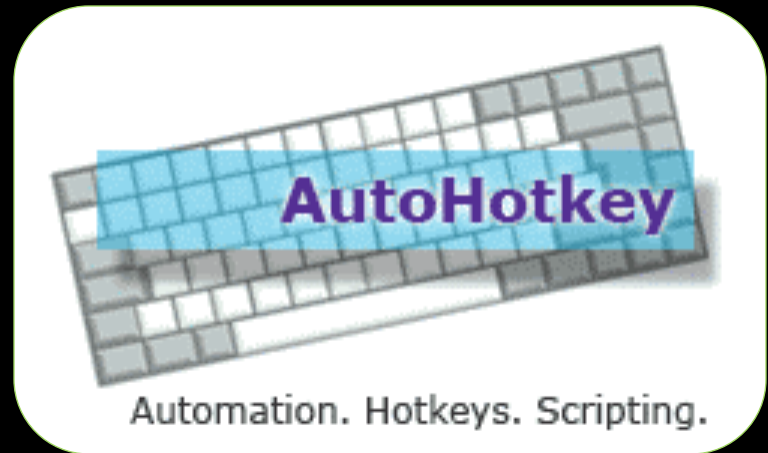
# Macros

- May automate keystrokes:
  - Common lengthy phrases
  - Hard-to-type characters
- May respond to active window or content on screen
- May perform complex actions



# AutoHotkey

- Free, open-source macro software for Windows
- Macros can be written by hand or recorded
- Compiles to .exe file for easy distribution





# Automated keystrokes

- Word replacement:
  - brn -> “Includes bibliographical references (p. ) and index.”
  - (c) -> ©
- Hotkeys:
  - Unified interface: Window-S for search
  - Overwrite functions you don’t want to use
- Selection boxes
  - Common fields to add to local records
  - Vendor/donor notes



# More complex macros

- Capture Bib Number (or Mfhd Number or item Number) from active window title
- Change cataloging defaults
  - Select cataloging environment from list
  - Switch to correct MARC templates
  - Modify item defaults



## Example: Substitution

⋮ \* ⋮ (c) ⋮ ⋮ ©

## Example: Window-S = Search

`$#s::`

`IfWinActive, Voyager Cataloging { Send !rs }`

`else {`

`IfWinActive, OCLC Connexion { Send {F2} }`

`else { Send $#s }`

`}`

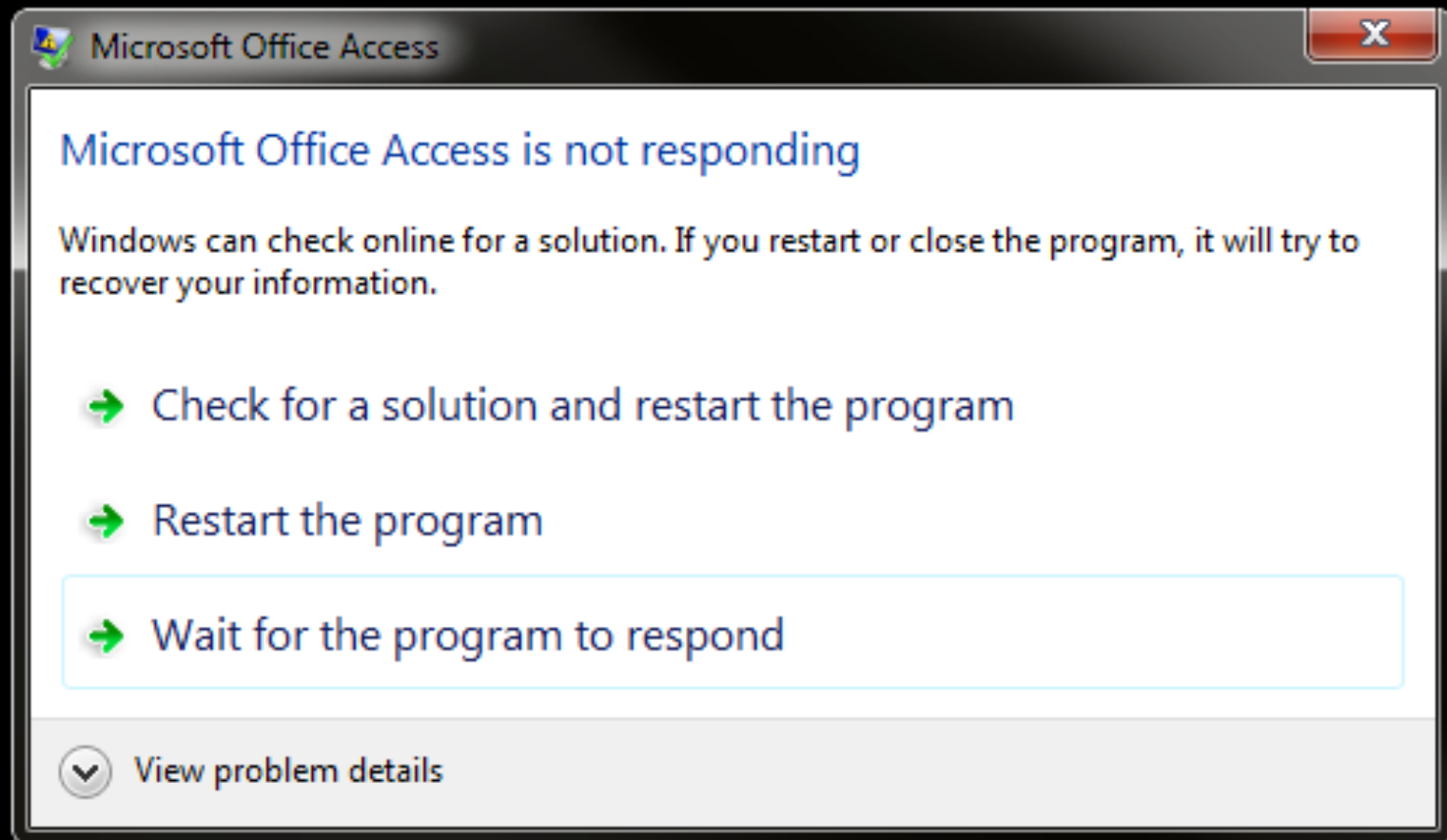
`return`

# External Database Access

- SQL queries through Microsoft Access
- Access any Voyager data
- Cataloging, Acquisitions, Circulation all together

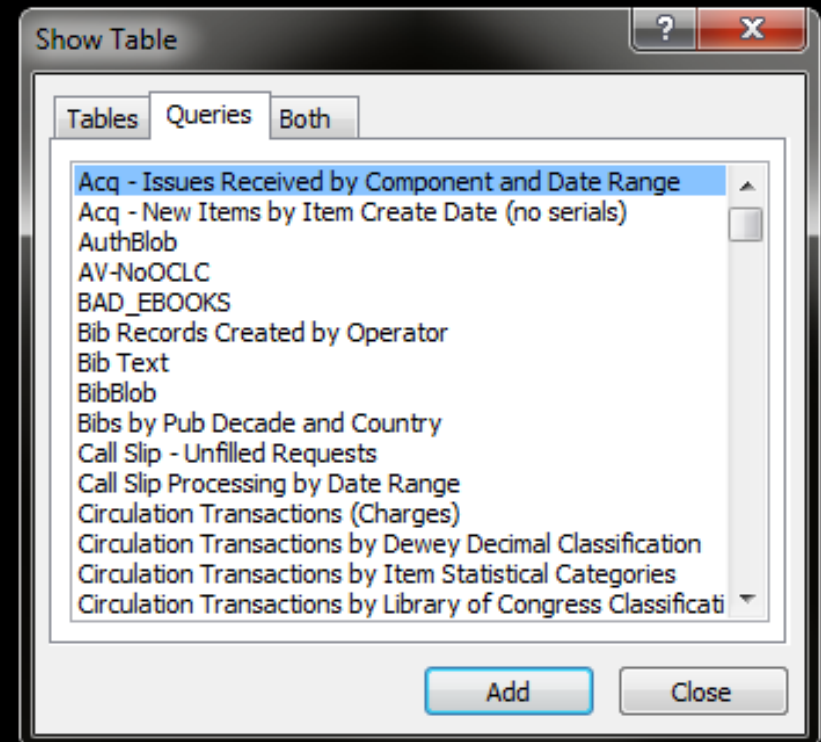


# But sometimes...



# Other reasons to not use (only) Microsoft Access

- Some training required
- May want to automate queries to run periodically
- May want to run parameterized queries
- May want to share results with patrons





# Oracle queries

- Running queries from an external program can be simpler, faster, and have more flexibility in output
- Most major programming languages include Oracle libraries
- You don't have to know those languages to get started, just how to run them

The Oracle logo, consisting of the word "ORACLE" in a bold, red, sans-serif font, with a registered trademark symbol (®) to the upper right of the "E". The logo is centered within a white rounded rectangle.

# QuickQuery (PHP)

- Configure once with your read-only database credentials
- Make a new copy of the program for your query
- Build your query (if in Access, make a few modifications)
- Run query, redirect to capture output



# Quick-Query code

---

```
<?php
#
#   quick_query.php - query a Voyager server, output as TSV or HTML table
#
#   (c)2013 Kathryn Lybarger. CC-BY-SA
#

$db_host = 'HOST.hosted.exlibrisgroup.com'; # host
$db_port = '1521';           # port
$ro_login = 'XXXX';          # read-only login
$ro_passwd = 'XXXX';         # read-only password
$html_table = 1;             # set to 0 for TSV output

$query = 'SELECT * FROM VERSIONS'; #query

#-----you should not have to edit below this line-----

$db = "(DESCRIPTION=(ADDRESS_LIST = (ADDRESS = (PROTOCOL = TCP) (HOST = $db_host)
(PORT = $db_port))) (CONNECT_DATA=(SID=VGER)))";
$conn = oci_connect($ro_login, $ro_passwd, $db);

$stmtid = oci_parse($conn, $query);
oci_execute($stmtid);

if ($html_table) {
    # print HTML table
```

## Editing QuickQuery

```
$db_host = 'HOST.hosted.exlibrisgroup.com'; # host
```

```
$db_port = '1521';    # port
```

```
$ro_login = 'XXXX';   # read-only login
```

```
$ro_passwd = 'XXXX';  # read-only password
```

```
$html_table = 1;      # set to zero for TSV output
```

```
$query = 'SELECT * FROM VERSIONS';        #query
```

# Running QuickQuery

- Command line:
  - `php quick-query.php > output.txt`
- Text file can be opened with Excel or any text editor
- If the result is too large to be manageable:
  - `split output.txt`

# Unix commands

- Available on linux or mac
- Install **Cygwin** on Windows
- Tools I cannot work without:
  - **find** – find files based on their name, age, permissions, etc.
  - **grep** – quickly search contents of files for patterns
  - **vim** – very powerful text editor
  - **diff** / **vimdiff** – find differences between text files
  - **less** – page through a file
  - **man** – view the manual for any unix command

# A few queries

- Pull all AV records with no OCLC number
- Do we have any fiction in the Engineering Library?
- Do we have any call numbers that end in eb?





# A few larger queries

- Pull all URLs containing “netlibrary” to run through external link checker
- Pull all fields whose content starts with asterisk
- What subjects have we used in the 690 field?



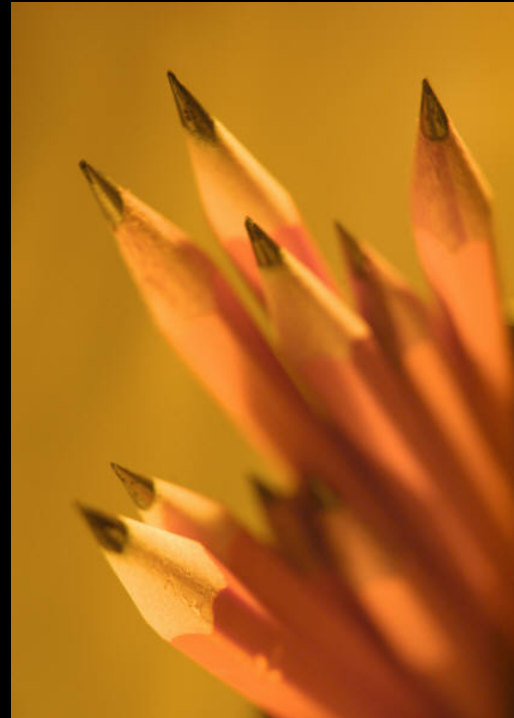
# Repurposing query output

- List all items from a Mfhd on a web page
- Compile cataloging statistics for different cataloging units
- “New bookshelf” feeds from the catalog
  - Everything in Russian or about Russia
  - All original Cataloging from University of Kentucky Libraries



# Database writing

- Gary Strawn's programs (Northwestern University)
  - Cataloger's Toolkit
  - Location Changer
  - Bib Delete
  - ...



# Server access

- Even simple scripts can save lots of time
- Examples:
  - Load MARC files (pbulkimport + arguments)
  - Retrieve deleted/overlaid MARC records



# Open Source Software

- My software is open source:
  - <https://github.com/zemkat>
- Voyager – scripts and macros for working with Voyager
- AutoHotkey – other macros
- EbookMobile – create new bookshelf feeds from SQL queries



Any questions?

# Contact me

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